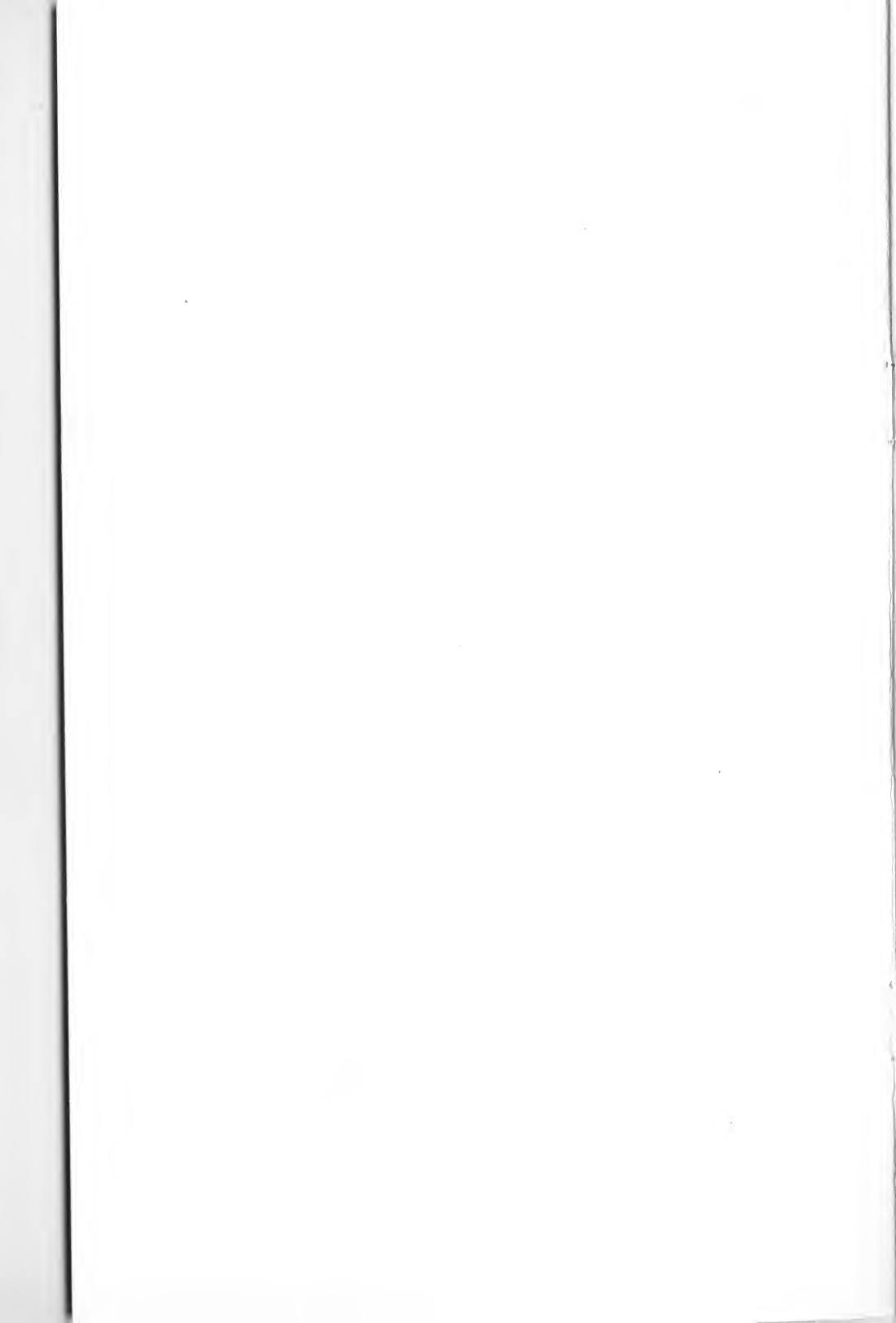


QS Reversi



C. Dell'Orco '81



QS REVERSI

Atari Version

By Lee Merrill

An OTHELLO-playing game from*



QUALITY SOFTWARE

6660 Reseda Blvd., Suite 105, Reseda, CA 91335
(213) 344-6599

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LOADING THE QS REVERSI DISKETTE

QS REVERSI will run on an Atari 800 personal computer that has at least 40K of user memory. It comes on a diskette that if formatted for use with an Atari 810 disk drive. The BASIC cartridge is not used.

1. Make sure the computer is turned off. Remove the BASIC cartridge.
2. Insert your diskette in drive number 1.
3. Power on your Atari computer.
4. A QS logo will appear on the screen and remain for a few seconds during program initialization. Then the game board will appear with a message at the top of the screen that asks "ENTER LEVEL OF PLAY (1-12):".

CAUTION: The QS REVERSI diskette cannot be copied and attempting to put DOS on it, copying the program, or pressing RESET while loading may destroy the program on the diskette. If your diskette should ever fail, it will be replaced promptly by Quality Software. Please see the end of these instructions for our replacement policy.

SUMMARY OF QS REVERSI COMMANDS

The following table of commands is provided for quick reference after you have become familiar with the game. If you have not played QS REVERSI before, please read the full description of these commands and the rules of Reversi on the following pages.

RETURN	Accept flashing square as current move
→	Find next legal move to the right or down
←	Find next legal move to the left or up
CTRL B	Go back one move
CTRL C	Corner giveaway. A handicapping method available only at the beginning of the game
CTRL D	Display labels on columns and rows
CTRL E	End the game prematurely
CTRL F	Go forward one move
CTRL L	Change level of computer's skill
CTRL N	Normal move entry. Disables tournament move entry
CTRL S	Switch display from board display to text display or vice versa
CTRL T	Tournament move entry. Disables normal move entry
CTRL P	Changes the color of the game board

STARTING THE GAME

If you are not familiar with the rules of Reversi, today often called Othello*, then be sure to study the Rules of Reversi starting on page 6 of this booklet before proceeding further.

Level of Play

The first thing you are asked for is to enter the skill level for the computer. There are 12 skill levels ranging from 1 to 12. At Level 1 the computer plays at a very low level of skill. By level 6, the program is using its best strategy, but only looks ahead one move. At levels above six the computer looks ahead one move further for each increase in skill level. Thus, at level 12 the computer looks ahead seven moves, and takes about four minutes to make a decision. The look ahead at end game is even greater at the higher levels, enabling the computer to play a virtually perfect end game.

QS REVERSI will function properly in 40K of RAM, but it will not play higher than level 9, even if levels 10, 11, and 12 are requested. These higher levels of play (which very few humans can beat) are available with a 48K system.

Be forewarned that the computer plays very skillfully. Beginners should start off at level 1 or 2.

Black Goes First

After you have selected the level of play, the question, "DO YOU WANT TO GO FIRST (Y/N)" will appear at the top of the video. Answer "Y" if you want to move first, "N" if you want the computer to make the first move. Whoever moves first will use the black pieces. After selecting who goes first, the computer waits for you to press RETURN before starting the game. This allows you to perform handicapping or to enter the tournament mode, if you wish.

Scoring

Although the score during the game means very little, QS REVERSI displays the score at all times on the left hand side of the screen. The number inside the circle under PLAYER is the number of pieces showing the player's color, and vice versa. The computer's level of skill is also displayed at the lower left within brackets.

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PLAYING THE GAME

When it is your turn to move, a flashing border will be displayed over a blank square. This indicates a legal move you can make. Hitting the left or right arrow keys will move the flashing square to other legal move positions. When you have decided which square you want to move to and have positioned the flashing border on that square, press RETURN and the move will be made. This method of entering moves is termed the "normal" mode.

When it is the computer's turn to move, it will "think" for a while (at levels 1 to 9, a few seconds at most), and then print a flashing square where it intends to move. At levels 10 to 12, the computer will notify you that it has determined its move by causing a beeping noise. Press RETURN and the computer's move will be made.

An alternate mode of move entry, the "tournament" mode, is also available (see Tournament Move Entry below). In this mode, you specify your move by entering first a letter for the column and then a number for the row, without a separating comma. Columns and rows are identified as in Figure 1.

	A	B	C	D	E	F	G	H	
1									1
2									2
3									3
4									4
5									5
6									6
7									7
8									8
	A	B	C	D	E	F	G	H	

Figure 1. Column and Row Labels

COMMAND DESCRIPTIONS

Nine special commands are available in QS REVERSI. With the exception of handicapping (CTRL C), all of these commands may be issued at any time during the game. Special commands are issued by holding down the CTRL key and pressing a single letter key.

Taking Back Moves (CTRL B)

Typing CTRL B will instruct the computer to go back one move in the game. This allows you to take back a bad move, or to explore different possibilities in the game.

Restoring a Move (CTRL F)

Typing CTRL F will instruct the computer to go forward one move in the game, assuming that you have previously backed up one or more moves. Of course, if you back up and make a new move, subsequent moves will be erased.

Changing Skill Level (CTRL L)

Typing CTRL L will allow you to change the level of the computer's play during the game. You will be asked to input the desired level, and then play will resume at the new level.

Tournament Move Entry (CTRL T)

In the "normal" mode, QS REVERSI shows you what the legal moves are. In a tournament you would have to figure out for yourself what the legal moves are. This is also the case if you use QS REVERSI's "tournament" mode of move entry. You will be asked to enter the column and row number of each move, and illegal moves will be disallowed. To get into the "tournament" mode, type a CTRL T. You will probably also want to type a CTRL D to display the row and column labels.

Normal Move Entry (CTRL N)

To return to "normal" move entry when in the "tournament" mode, type a CTRL N.

Display Row and Column Labels (CTRL D)

Typing CTRL D will label the rows and columns of the board according to the official standard for Reversi. The rows and columns are labeled as in Figure 1. To remove the labels, type CTRL D again.

Switch to Text Display (CTRL S)

Typing CTRL S will switch the video display from the playing board to a text printout of all moves made in the game up to the current move. Or, if the text printout is on the video, CTRL S will switch back to the board display.

End Game Prematurely (CTRL E)

Typing CTRL E will end the game prematurely and allow you to begin a new game.

Handicapping by Corner Giveaway (CTRL C)

Before the game begins, when the computer is waiting for you to press RETURN to start the game, you may type CTRL C to give one or more corners to yourself or to the computer. This is a common handicapping method in the game of Reversi. You will be asked whether you or the computer will get the corners and the number of corners to be given (0 to 4).

Modifying the Color of the Game Board (CTRL P)

Pressing CTRL P makes the playing board change color, allowing the player to select a color appealing to him.

THE RULES OF REVERSI

Reversi is an ancient game of strategy, where the object is to have more pieces of your color on the board at the end of the game. The rules for playing are simple:

1. Initially, the board has four pieces, two black and two white, placed on the four central squares as shown in Figure 2. Black always moves first.

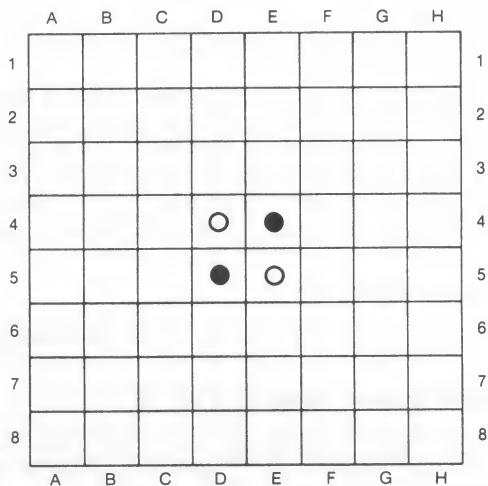


Figure 2. Starting Position

2. On each turn the player must place a disk of his color on the board so that at least one piece of the opposite color is trapped between the piece played and a piece of the same color already on the board. All opponent's pieces so trapped are flipped to the color of the player.

In the example of Figure 3, the only legal plays for black are on the squares marked with x's (A5, C3, C4, and D3). If black plays on A5, for example, then the white pieces on B5 and C5 will be changed to black.

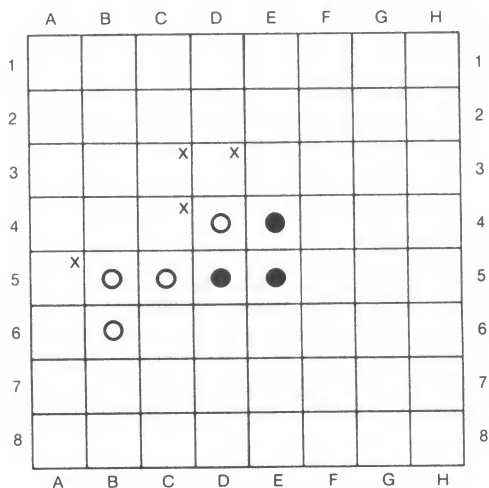


Figure 3. Example Board Position

3. A move may flip disks in several directions (horizontally, vertically, or diagonally) at the same time, and all disks which may be flipped by a move must be flipped.

4. If a player cannot place a piece such that it flips at least one of his opponent's pieces, then he must pass (forfeit) his turn. A player cannot pass if he has a legal move. When neither player can move (usually when the board becomes full, but not always) the game is over and the player with the most pieces is the winner.

5. Although the winner of a single game is the player with the most pieces of his color at the end of the game, the margin of the win is also important, especially in tournament play. Often a two game match will be played, with one opponent starting first in the first game, the other starting first in the second game. The winner of the match is the player who had the highest total of pieces in the two games.

STRATEGY TIPS

In Reversi, the corners and the border squares are the most important, and the squares adjacent to the corners are dangerous (because they give your opponent access to the corner). Also try to reduce the number of moves available to your opponent, because this helps you force him into moves that are not to his advantage.

You may find the following references on playing and programming Reversi helpful in improving your own strategy:

1. Hasegawa, Goro and Brady, Maxine, "How to win at Othello." Jove Publications, 1977
2. Maggs, Peter B., "Programming Strategies in the Game of Reversi." November 1979 Byte, page 66.
3. Frey, Peter W., "Simulating Human Decision Making on a Personal Computer." July 1980 Byte, page 56.

REPLACEMENT POLICY

QS REVERSI is provided on a high quality diskette that should give you trouble free usage for many years. If the diskette should fail, simply return it for replacement to Quality Software, 6660 Reseda Boulevard, Suite 105, Reseda, CA 91335. If you have owned the diskette for less than 90 days, include your receipt and there will be no charge. Otherwise there is a charge of \$5.00. Outside North America add \$5.00 for air mail shipping and handling.



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QS REVERSI
By Lee Merrill
ATARI 800 40K



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Protect
Protéger

Protect
Schützen

保護



No
Non

No
Falsch

注意



Insert Carefully
Insérer avec soin

Insertar
Sorgfältig Einsetzen

挿入注意



Never
Jamais

Nunca
Nie

絶対禁止



10°C - 52°C
50°F - 125°F



Never
Jamais

Nunca
Nie

絶対禁止